Work Order ID 56713

March 4, 2010 3:20:17 PM

Item ID: D3281-3L08 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Floor Protector, Aft LH

Start Date: 04/03/2010 **Start Qty:** 5.00 **Cust Item ID:**

Required Date: 12/03/2010 **Req'd Qty:** 5.00 **Customer:**

Reference:

Approvals: **Process Plan:** M **Date:** 10-3-09 **Tooling:** **Date:** **Run Start** **Stop**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D3281	DEO E-1

100 HAND FINISHING THERMOFORMING 0.00

Thermoform

Thermoforming Machine

Memo 0.00

Cut Blanks

BB 10/03/09 XS

Product dried at 255F. Time IN 4:20pm 10/03/08 AM

Time OUT 7:00AM 10/03/09 BB

110 THERMOFORMING MACHINE 0.00

Thermoform

Thermoforming Machine

Memo 0.00

Thermoform as per Dwg. D3281and Folio FTA 009

Dwg. Rev. E

Folio Rev. E

Pull Temp 325 325 325 325 325

Mould Temp 218 215 211 210 209 BB 10/03/09 XS

Release Temp 258 257 256 254 255

120 QC2- Inspect parts off machine FAI/FAIB 0.00

QC

Quality Control

Memo 0.00

BB 10/03/09

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56713

March 4, 2010 3:20:17 PM

Item ID: D3281-3L08 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Floor Protector, Aft LH

Start Date: 04/03/2010 **Start Qty:** 5.00 **Cust Item ID:**

Required Date: 12/03/2010 **Req'd Qty:** 5.00 **Customer:**

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** **Stop**

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	HAND FINISHING THERMOFORMING	0.00							BB 10/03/10 (X5)
Thermoform	**Memo**	0.00							
Thermoforming Machine	Trim to Finished Dimensions								
140	QC2- Inspect parts off machine FAI/FAIB	0.00							BB 10/03/10 (X5)
QC	**Memo**	0.00							
Quality Control									
150	QC5- Inspect part completeness to step on W/O	0.00				(X5)			
QC	**Memo**	0.00							
Quality Control									

10/03/11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56713

March 4, 2010 3:20:17 PM

Item ID: D3281-3L08 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Floor Protector, Aft LH

Start Date: 04/03/2010 **Start Qty:** 5.00 **Cust Item ID:**

Required Date: 12/03/2010 **Req'd Qty:** 5.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
Packaging	Packaging					10-3-12		SD	SK
Packaging	**Memo**	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
QC									10/03/16 df
Quality Control	**Memo**	0.00							

MF
10-3-12

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 4, 2010 3:20:22 PM

1

Work Order ID: 56713

Parent Item: D3281-3L08

Parent Item Name: Floor Protector, Aft LH

Comments: IPP Rev. A 10.02.24 New Issue LL

Start Date: 04/03/2010 **Required Date:** 12/03/2010

Start Qty: 5.00 **Required Qty:** 5.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MLEXS.118-90318-08		Purchased	No			100	sf	2,779.130	22.8068			

Lexan Sheet

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
MAT	2779.13	
~~111588~~	59.13	
113127	2720	

1
4

BB 10/03/09
BB 10/03/09.

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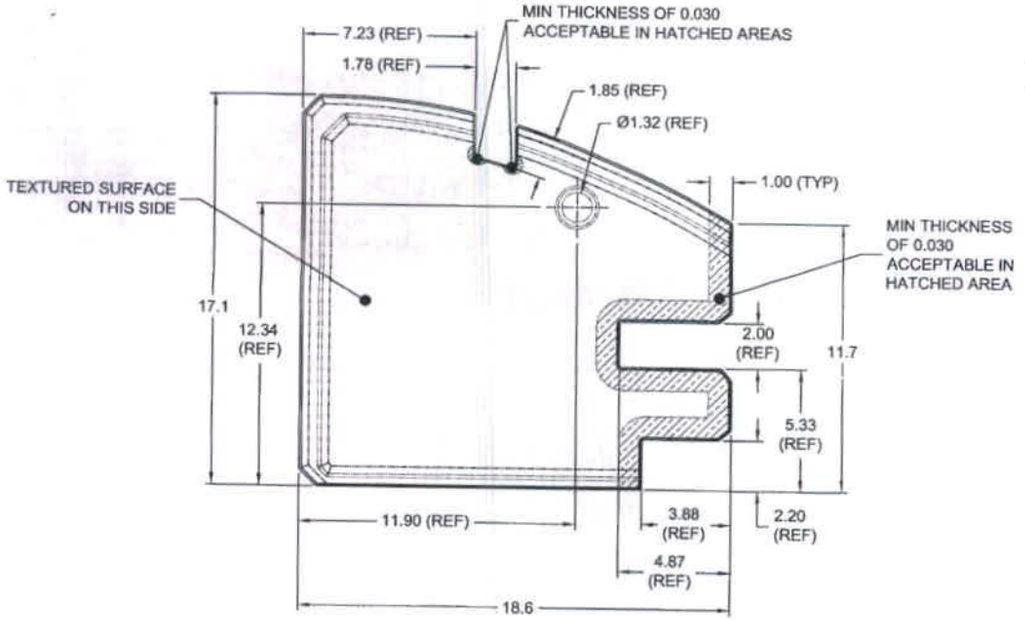
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

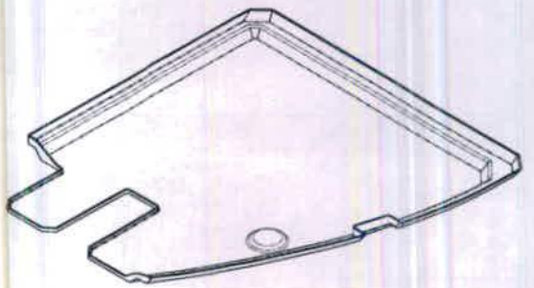
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 54743
BS 10-3-04

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RELEASED
2010 -02- 03

D3281-1 FLOOR PROTECTOR

D3281-1 NOTES:

1) THERMOFORM WITH MOLD D3281-1T1 PER DART QSI 022; TRIM AS SHOWN
 MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED
2) MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK
 (REF DART SPEC MLEXS.093-F6006-02)
3) FINISH: NONE
4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) BREAK SHARP EDGES: 0.010 MAX
7) IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-1" AND BATCH NUMBER "BXXXXX" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS
8) WEIGHT: 0.95 lb

REV.	DESCRIPTION	BY	DATE
E	-3/-4 NOW TRIMMED FLAT; RMV 0.25 BEVEL TO FACILITATE TRIMMING (ZN D6-3, D4-4)	CP	10.01.05
D	THICKNESS 0.093 WAS 0.125, MIN THICKNESS 0.070 WAS 0.080, P/N AND B/N ID WITH VIBRATING STYLUS (ZN A7-1, A7-2, A7-3, A7-4); D3281-4 NOW ON PAGE 4; CORRECT WEIGHTS (ZN A8-1, A8-2, A8-3, A8-4)	PH	08.03.28
C	UPDATE DIMS TO MATCH PARTS: COLOUR 701 WAS 700; GENERAL UPDATE	LE	07.10.09
B	NOW LEXAN; DIMS AS MANUFACTURED	CP	05.11.25
A	NEW ISSUE	CP	04.05.03

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3281	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		FLOOR PROTECTOR	NTS
DATE	10.01.05		

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Dart Aerospace Ltd

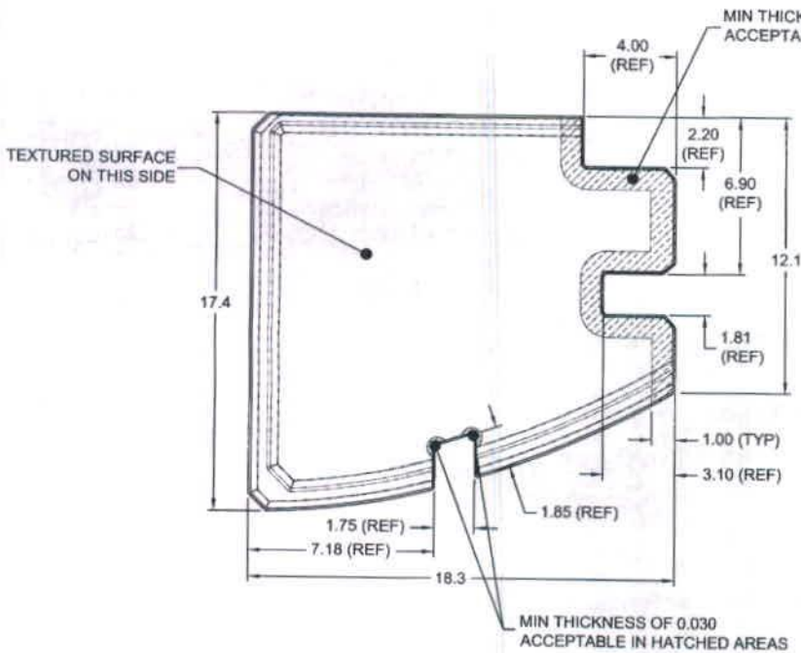
W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

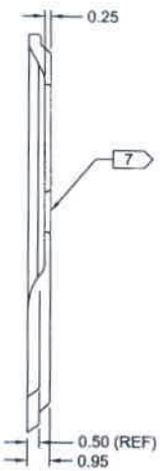
Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

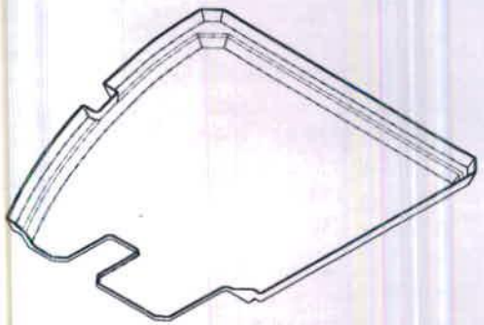
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries







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2010 -02- 03

D3281-2 FLOOR PROTECTOR

D3281-2 NOTES:

1) THERMOFORM WITH MOLD D3281-2T1 PER DART QSI 022; TRIM AS SHOWN
 MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED
2) MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK
 (REF DART SPEC MLEXS.093-F6006-02)
3) FINISH: NONE
4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) BREAK SHARP EDGES: 0.010 MAX
7) IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-2" AND BATCH NUMBER "BXXXXX" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS
8) WEIGHT: 0.97 lb

w/o 54713

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. E
MFG. APPR.		D3281 SHEET 2 OF 4
APPROVED		TITLE SCALE
DE APPR.		FLOOR PROTECTOR NTS
DATE 10.01.05		COPYRIGHT © 2004 BY DART AEROSPACE LTD

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	56713.
Description: Floor Protector, Aft LH	Part Number:	D3281-3 L08
Inspection Dwg: D3281 **Rev:** ~~D~~ F.		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [] Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than 0.1875"	✓			
Shape Definition	—			
Texture Retention	—			
Material imperfections such as bumps, cracks, voids, scratching	—			

Measured by: BB **Date:** 10/03/10.

TRIMMING SECTION

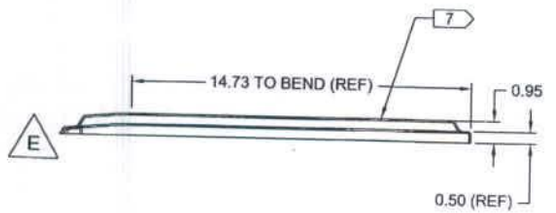
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
17.8	+/-0.100	17.7	✓			
17.1	+/-0.100	17.	—			
14.3	+/-0.100	14.275	—			
0.95	+/-0.030	.958.	—			
~~0.25~~	~~+/-0.030~~	N.A.				
~~3.1~~	+/-0.100	N.A	—			
0.050	Min	.084.	—			
0.070	Min	.096.	—			

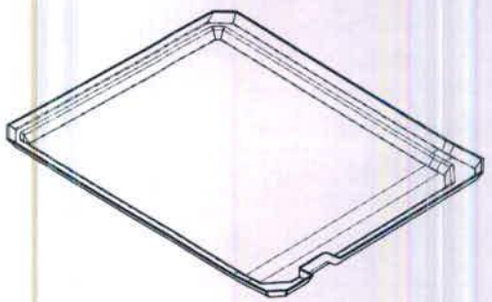
Measured by: BB **Date:** 10/03/10.

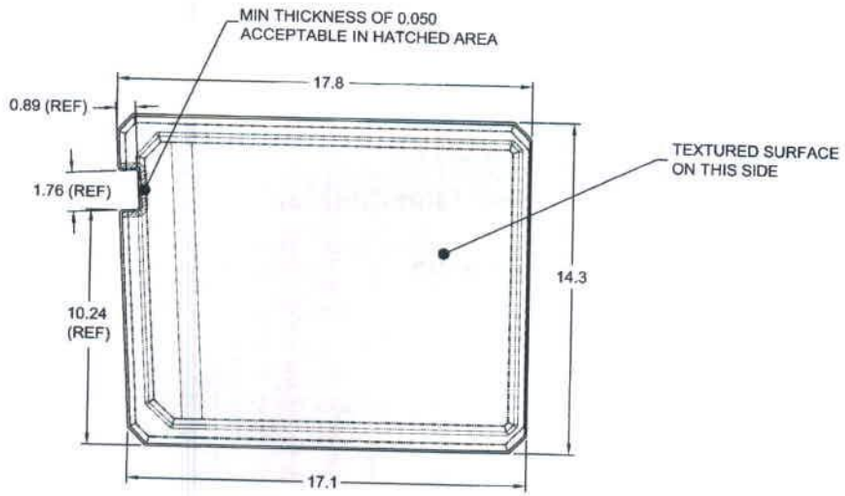
Audited by: DL **Date:** 10/03/10.

Prototype Approval: N/A **Date:** N/A

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue	KJ/DL	
B	08.04.16	Dimensions updated per Dwg Rev D	KJ/DL	
C	08.09.12	Tolerance revised for 0.070 dimension	KJ/DL	







D3281-3 FLOOR PROTECTOR

DEO ATTACHED

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2010 -02- 03

WO 56713

D3281-3 NOTES:

1) THERMOFORM WITH MOLD D3281-3T1 PER DART QSI 022; TRIM AS SHOWN
 MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED
2) MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK
 (REF DART SPEC MLEXS.093-F6006-02)
3) FINISH: NONE
4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) BREAK SHARP EDGES: 0.010 MAX
7) IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-3" AND BATCH NUMBER "BXXXXX"ON SMOOTH SIDE OF PART USING VIBRATING STYLUS
8) WEIGHT: 0.87 lb

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. D3281 REV. E
MFG. APPR.		SHEET 3 OF 4
APPROVED		TITLE FLOOR PROTECTOR SCALE NTS
DE APPR.		
DATE 10.01.05		COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

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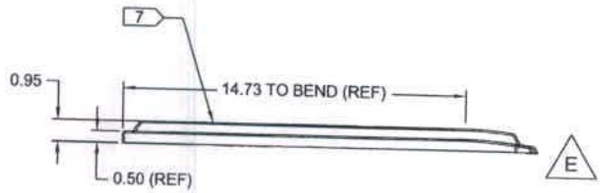
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

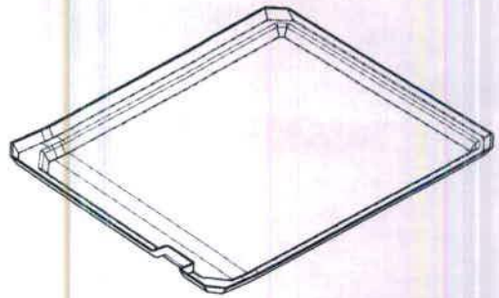
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

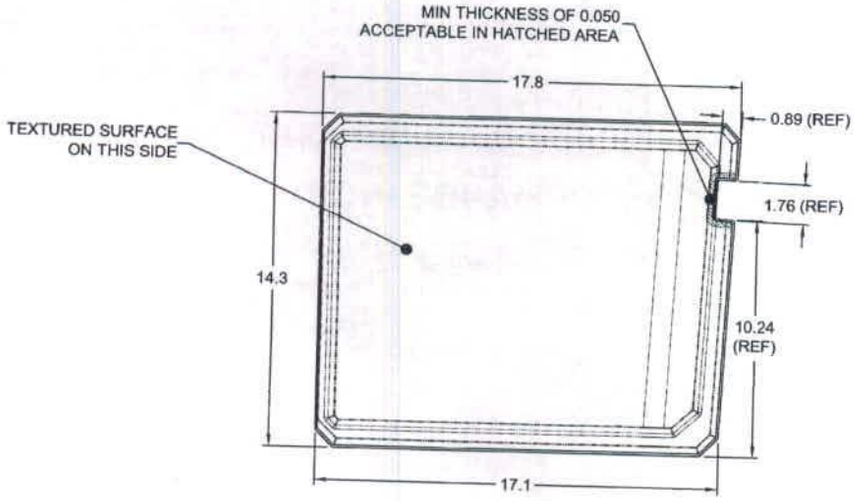
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries







D3281-4 FLOOR PROTECTOR

DEO ATTACHED

RELEASED
2010 -02- 03

w/o 56713

D3281-4 NOTES:

1) THERMOFORM WITH MOLD D3281-4T1 PER DART QSI 022; TRIM AS SHOWN
 MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED
2) MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK
 (REF DART SPEC MLEXS.093-F6006-02)
3) FINISH: NONE
4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) BREAK SHARP EDGES: 0.010 MAX
7) IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-4" AND BATCH NUMBER "BXXXXX"ON SMOOTH SIDE OF PART USING VIBRATING STYLUS
8) WEIGHT: 0.87 lb

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. D3281 — REV. E — SHEET 4 OF 4
MFG. APPR.		TITLE: FLOOR PROTECTOR — SCALE: NTS
APPROVED		
DE APPR.		
DATE 10.01.05		

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DRAWING NO.	TITLE	REV.	DART AEROSPACE LTD	D.E.O. NO.	SHEET NO.	SCALE
D3281	FLOOR PROTECTOR	E	ENGINEERING ORDER	D3281-E-1	SHEET 1 OF 1	NTS
DRAWN qp	CHECKED		MFG. APPR.	APPROVED	DE APPR.	
DATE 10.02.24	DATE 10.02.25		DATE 10/02/25	DATE 10.02.25	DATE 10.02.25	

PURPOSE
ADD "D3281-x**L08**" MATERIAL OPTION. EXISTING PARTS TO BE IDENTIFIED AS "D3281-x**L02**"

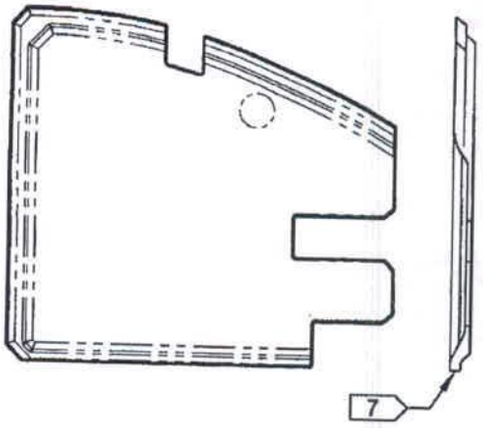
w/o 56713

CHANGE
D3281-xL08 PARTS ARE EQUIVALENT TO THE RESPECTIVE "-x" PARTS EXCEPT AS DETAIL BELOW. THE MATERIAL, IDENTIFICATION, AND WEIGHT NOTES ARE AMENDED AS FOLLOWS:

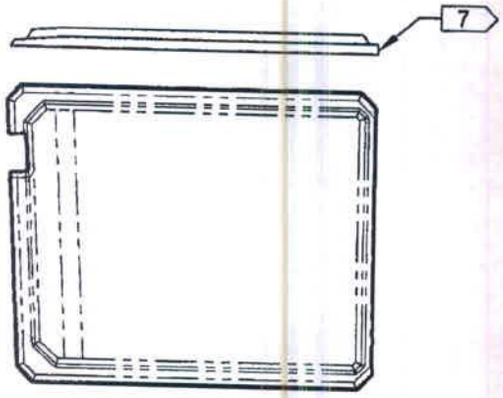
2) MATERIAL: -xL02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-xL08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)

7) IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-xLxx" AND B/N "Bxxxxx" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS. FOR -xL08 PARTS, LOCATE ENGRAVING ALONG PERIMETER OF PART AS SHOWN.

8) WEIGHT: D3281-1L02/-2L02 = 0.95 lb D3281-1L08/-2L08 = 1.13 lb
D3281-1L02/-2L02 = 0.87 lb D3281-3L08/-4L08 = 1.05 lb



D3281-1L08 FLOOR PROTECTOR (SHOWN)
D3281-2L08 FLOOR PRETECTOR (OPPOSITE)
LOCATION OF ENGRAVING



D3281-3L08 FLOOR PROTECTOR (SHOWN)
D3281-4L08 FLOOR PRETECTOR (OPPOSITE)
LOCATION OF ENGRAVING

RELEASED
2010 -02- 26

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries